Background on Eight-hour standard

The Clean Air Act of 1970 was mandated by the Environmental Protection Agency to set National Ambient Air Quality Standards (NAAQS) for the six most common air pollutants. These standards were set at levels to protect public health and serve two important purposes. First, they would provide air quality information to the public and second, they had to provide state and local governments with targets for achieving clean air.

One of the six air pollutants is ozone. Ozone is formed when highly reactive hydrocarbons and NOx combine to "cook" on hot, windless, sunny days. When ozone is inhaled, it can cause respiratory problems in children, the elderly, those with respiratory disease and even healthy adults who are working or exercising outside.

On June 15, 2004, EPA implemented the more stringent 8-hour standard for monitoring ozone and set a revocation date of June 15, 2005 for the one-hour standard. The new standard will protect the public against longer ozone exposure periods.

The eight-hour standard reduces the acceptable parts per million (ppm) concentration of ozone to 0.08 as measured over any consecutive eight hours. EPA defines the new standard as the average of the annual fourth highest maximum eight-hour ozone concentration at each monitor over a three-year period. This average is called the design value. The area's design value is equal to the highest, individual monitor design value. More information about the new standard can be viewed on the EPA website at http://www.epa.gov/airlinks/airlinks4.html.

Louisiana has made air quality improvements for the eight-hour ozone levels over the past several years. Now, only one five-parish area of Louisiana is out of attainment for the eight-hour standard. The five-parish Baton Rouge area includes East Baton Rouge, West Baton Rouge, Livingston, Ascension and Iberville.

To gather the air quality data, the Louisiana Department of Environmental Quality has 43 ambient air monitoring sites located throughout the state. These monitors are placed in areas where it is determined that there are sources of emissions. The monitoring sites are approved by EPA. The data from the monitors are used to calculate the design values for the individual monitors and the area.